

Listing of Claims:

Claim 1 (amended) A superconducting coil system comprising a superconducting coil solely made of superconducting wires housed in a metal conduit without pure copper wires and a normal conducting coil which is electrically coupled to the superconducting coil and allows a portion of current flow to bypass the superconducting coil by induction, the superconducting coil and the normal conducting coil being arranged separately in a coil case, and the normal conducting coil having a current time constant (L_2/R_2) which is larger than L_1/R_1 , or the time constant at which the current through the superconducting coil decays rapidly after the conductors in the superconducting coil made a transition to the normal conducting state, in which L_1 and L_2 represent the self-inductances of the superconducting coil and the normal conducting coil, respectively, R_1 represents the resistance for causing rapid decay of the current flow through the superconducting coil, and R_2 represents the resistance of the normal conducting coil.

Claim 2 (previously presented) The superconducting coil system according to claim 1 wherein the coefficient of electrical coupling between the superconducting coil and the normal conducting coil is at least 50%.

Claims 3-4 (canceled)

Claim 5 (previously presented) The superconducting coil system according to claim 1, wherein the superconducting coil is fabricated of cable-in-conduit conductors.

Claim 6 (previously presented) The superconducting coil system according to claim 2, wherein the superconducting coil is fabricated of cable-in-conduit conductors.

Claim 7 (previously presented) The superconducting coil system according to claim 1, wherein the normal conducting coil is fabricated of copper, aluminum or other metal conductors of low resistance.

Claim 8 (previously presented) The superconducting coil system according to claim 2, wherein the normal conducting coil is fabricated of copper, aluminum or other metal conductors of low resistance.

Claim 9 (previously presented) The superconducting coil system according to claim 5, wherein the normal conducting coil is fabricated of copper, aluminum or other metal conductors of low resistance.

Claim 10 (previously presented) The superconducting coil system according to claim 6, wherein the normal conducting coil is fabricated of copper, aluminum or other metal conductors of low resistance.